

Client: Punjab Roads and Bridges Development Board (PRBDB)

System: Web Enabled Management Information System (MIS)

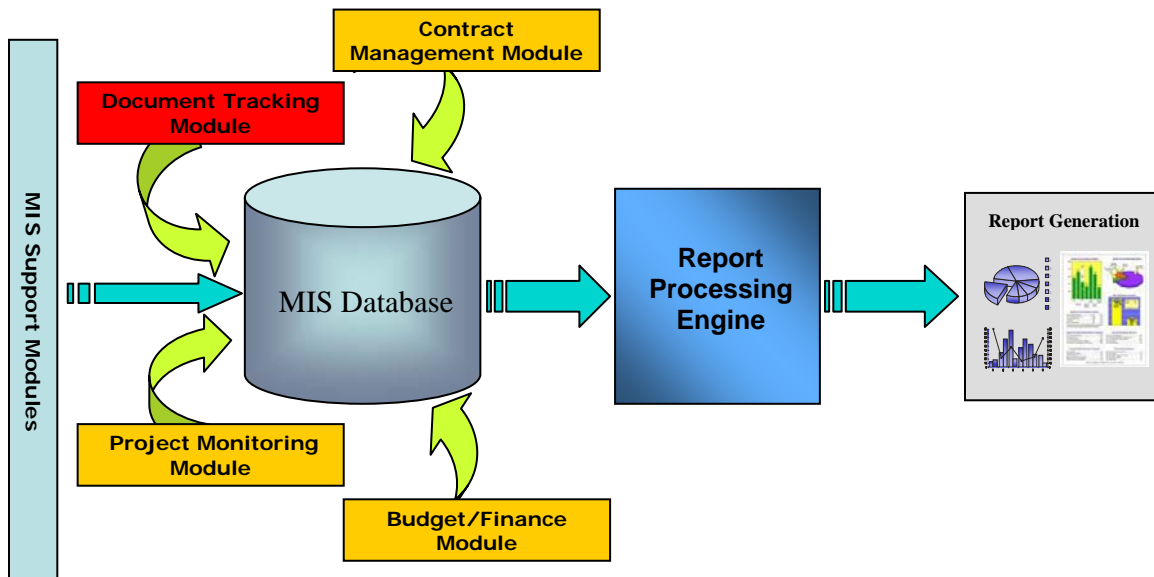
System Purpose:

The MIS developed as a web based management information system for the management of PRBDB assets & project related data in a format compatible to the requirements of various user groups. It is expected to act as a decision-support system helping PWD (B&R)/PRBDB senior managers and planners to formulate comprehensive PWD (B&R) asset management strategies, and engineers to execute the strategy on the ground and monitor the requirement of various users.

The MIS will provide PWD (B&R)/PRBDB and other stakeholders' access to up-to-date management information, such as:

- Status of the On-going Projects
- Fund and Budget Utilization
- Preparation of the Budget
- Status of the New Proposals
- Status of the Contracts
- Project wise Expenditure etc,

Overview architecture of the MIS software is given bellow



The MIS comprise several components broken down into two groups. The first group includes the core systems, which will be used to perform the primary MIS functions.

The second groups are called support modules and will be used to ensure the safety and security of the MIS.

MIS Core Systems

The MIS core systems will include the following:

- **Project Monitoring System (PMS)**

This system will comprise all primary functions to setup and maintain information related to individual projects/work, e.g., financial and physical Progress, and Fund Utilization at different levels.

- **Budget/Finance Management System (FMS)**

This system will manage information related to Account Head wise Budget, Fund Allotment and Expenditures.

- **Contract Management System (CMS)**

This system will with Contracts management. With this system the department can ensure deliverables on time, create professionalism in contracts, meet legal mandates, provide organization and standardization in administrative contracts, and reduce time spent on contracts.

- **Document Tracking System (DTS)**

Although this module is not in the scope of work, the same will be developed as per request of the Client. This system will keep the current status of various documents and facilitate tracking of documents/files/papers etc. on a continues basis.

- **Accident Analysis Module (AAM)**

This module was also not in the TOR, but in order to give support to the Road Safety Components of the PSRSP, the module has been introduced and the same is already under development and will be installed at different Police Stations of Punjab to record and store the Accident data particularly with respect to the black spots.

MIS Support System

- **Organizational Structure Maintenance Module (OSMS)**

This module comprises all primary functions to setup and maintain information related to the structure of PWD (B&R)/PRBDB organization.

- **Security & Access Module (SAM)**

The access to MIS system managed by the security and access control module from within the MIS. Security will be implemented to control access to functions and

processes within MIS systems and will be ensured by assigning individual table access rights to each user. The SAM will comprise functions such as the maintenance of system access rights and the allocation of profiles to users.

- **Data Backup & Recovery Module**

This module will provide functionality to backup or restore entire or selective database. Backup will in the form of database dump files, which can be later restored to the original database.

- **Query Wizard Module**

The query wizard module within the MIS will comprise functions such as the generation of standard reports and graphs as per user need.

Development Architecture

